

**A New *Tricharaea* Thomson with Unusual Variation
in Male Chaetotaxy¹**
(Diptera : Sarcophagidae)

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The following species of *Tricharaea* appears to be undescribed. Previously known species are from east of the Andes. This species agrees with them in general characters (the male genitalia are not useful in this group) but the body is darker grey, with thoracic vittae well defined, wing veins yellow only before the level of the costal spine, the front over 0.40 of the head width, the frontal vitta black on most of its length and wider, almost as wide as a parafrontal before the ocelli. In Townsend's (1935) key to Agriini (p. 176 *et seq.*) the larger males will run to either *Tricharaea* or *Mallonotum* Aldrich in couplet 2, depending on the presence or absence of median marginal bristles on the third abdominal segment; the small males and females trace to *Sarothromyia* Brauer and von Bergenstamm in couplet 31. *Xenagria mallogaster* Blanchard is a related species with setules on vein 3 beyond the anterior cross vein, the prosternum bare, and body pile apparently longer.

***Tricharaea penai* Dodge, new species**

Length 4.5–8.25 mm. A blackish grey species with thoracic stripes and abdominal tessellation weak but distinct, the latter in certain views; male with all femora enlarged, femora, pleurae, and abdomen wholly with erect, short, woolly hairs except on the smallest males; frontal vitta wholly black or reddish at lunule; vibrissal axis longer than antennal axis (epistoma strongly protuberant, metacephalon moderately so); parafrontofacials with dense black setules. Male foretarsi with erect setules, segments 2–4 globular.

MALE.—Front at narrowest 0.40 to 0.44 (average 0.425 of seven specimens) of head width; frontal rows of 4–7, usually 5 or 6 bristles, parallel, reaching base of second antennal segment; frontal vitta velvety black or reddish near lunule, which is concealed; proclinate frontoorbitals usually 1; reclinate frontoorbital 1; ocellars very strong; outer vertical 0.6 of inner; parafrontofacials bright grey pollinose with numerous scattered black setules; antenna black, third segment 0.82 to vibrissa and 1.5× second segment; arista short plumose on basal 0.67; vibrissae at epistoma, which is strongly warped forward; vibrissal span 1.33× width of parafacial; cheek black-haired, 0.25 of head height, constricted just before metacephalon, the latter with black beard ventrally; occiput convex, with few pale hairs below the neck; palpus blackish, clavate, slightly shorter than width of eye in lateral view. Head as long as high at both antennal and vibrissal angles; in some specimens longer than high.

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Thorax black with grey pollen, distinctly trivittate. Chaetotaxy: acrostichals 0:0; dorsocentrals 2:3; intraalars 1:2; supraalars 1:3; humerals 2; notopleurals 2; postalar declivity bare; scutellars 2 marginal, no apical, 1 weak discal; propleuron bare; prosternum and metasternum setuled; sternopleural 1; beret bare; hypopleurals 4-5; infrasquamals present, few. Wing hyaline, veins yellow basad of the costal spine, which is as long as anterior cross vein; vein 3 setuled above about 0.5 or less to cross vein; vein 1 with 0-3 setules *beyond the node*; posterior cross vein oblique, straight; vein 4 bent at obtuse angle; costal sections (from base) 20/35/15/57/17/5; basicosta yellowish-white; epaulet pale brown; squama yellowish white, fringed with white hairs. Legs black, femora enlarged; middle femur without comb; hind tibia not villous; foretarsus five-sevenths of tibia, with erect setules, segments 2-4 globular, together only 0.75 of basitarsus; hind coxae setuled posteriorly. Chaetotaxy variable, as described beyond.

Abdomen grey pollinose with slight pattern, in posterior view uniformly grey with a median dark line; entirely clothed with erect pile and nearly bristleless (large males) varying to small males with marginal rows on last two segments; sterna without bristles. Genital segments small, black, with fine hairs, no bristles. Forceps with a small internal tooth subapically.

FEMALE.—Front 0.43 of head width, with 2 proclinate frontoorbitals; frontal vitta like male, slightly narrowed towards the ocelli and about 0.33 of frontal width at any point; head may be longer than high; sternopleurals always 2; sides of thorax and venter of abdomen with erect pile; legs with femora slender, foretarsus equal to tibia, the joints not modified; abdomen broad and flat, basal 2 segments with weak lateral marginal bristles; segments 3-4 with marginal rows and 4th with a more or less complete row of discal bristles; sterna 2-4 with 1 pair bristles; genital orifice small, rather narrowly triangular; genital segments black, pollinose, the tergum divided, the last sternum (?) deeply notched. Otherwise much like the male.

TYPE SERIES.—Twenty-one males, 25 females, MAULLÍN (COAST OF LLANIQUE PROVINCE, BELOW MAULLÍN RIVER), CHILE, 16-21 February 1957, Luis Peña collector. *Holotype male* and other types at Washington State University; sets of paratypes showing variation to be sent to U. S. National Museum, California Academy of Sciences, Instituto Oswaldo Cruz, and Canadian National Collection.

Variation in chaetotaxy is remarkable and is described as follows. Six males have 3-6 bristles in MR (marginal row) of the fourth tergum, a LD (lateral discal) and perhaps a LM (lateral marginal) pair on the first, and no other abdominal bristles. These are the largest males. One male as above but with MM (median marginal) pair on third tergum. One male like the 6 but with LM on the intermediate segments, no MM. One male had MR on last two terga, no LM on second tergum. One male had LM on terga 1-2 and 3 bristles on left half of MR of tergum 3. Two males had MM on third tergum and LM on terga 1-3. Nine males had MR on terga 3-4, LM on terga 1-2. These are the smallest males, the largest 6 mm long; they are also the least "woolly." The basic

minimum pattern of bristles in the male sex is therefore a MR on tergum 4 and a LD pair on tergum 1. To this may be added a variable number of marginals on tergum 3 and/or LM on terga 1-3.

The females all have MRs on terga 3-4 and weak LM on terga 1-2. They also have a more or less complete row of weaker discal bristles on tergum 4.

Variation in male femoral bristles is also remarkable. The largest male has 2 preapical bristles on anterior side of hind femur and a transverse row of 3 preapicals on posterior side of mid femur, the femora conspicuously swollen and densely furry. The smallest male has an anterodorsal row of 3-4 on apical half of hind femur and two weaker bristles in the anteroventral row, one at basal third of length, and 2 subapical bristles on posterior side of hind femur; the middle femur with a weak anterior bristle at middle; the vestiture much less conspicuously furry.

All tibiae bear erect ventral pile (furry) in the large males, but have only recumbent setules in the small males and in the females. Males have but one sternopleural bristle (one male had two on one side only); females always have two. By contrast, related species such as *Sarothromyia femoralis* (Schiner) have two or two with a weak third in both sexes.

The males varied from 4.5 to 8.25 mm in length; females from 5 to 6.7 mm. There are no females comparable in size to the largest males. The largest male has the abdomen wholly furry; most specimens have at least some reclinate setules along the middorsal line and the small males have only a few erect hairs laterally above the level of the LM.

The dorsal setules on the apical section of vein 1 (beyond the node) are a noteworthy and variable character. Twenty percent of the females had 1-3 setules on at least one wing, whereas 48% of the males possessed these setules. I have designated the largest male as holotype; it has an apical setule on one wing.

LITERATURE CITED

- TOWNSEND, C. H. T. 1935. Manual of myiology, Vol. II. Itaquasetuba, Brazil.
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